

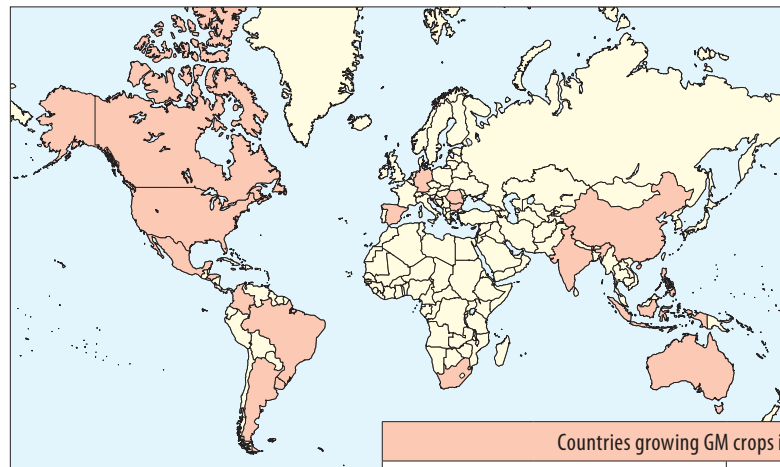
BRIEF #2

Genetically Engineered (GE) Crops: A Rapidly Expanding Market

ADOPTION IS GROWING

- From 1996 to 2003, the global area of transgenic crops has increased 40-fold, from 1.7 million hectares (mha) in 1996 to 67.7 mha in 2003. These were grown by 7 million farmers in 18 countries.
- In 2003, six principal countries (USA, Argentina, Canada, Brazil, China, and South Africa) grew 99% of the global transgenic crop area. The top 6 countries included 4 developing countries and 2 industrial countries.
- Recently, two new countries, India and the Philippines, joined the global group of countries that are growing genetically engineered crops.

Figure 1. Distribution of transgenic crops worldwide (James, C. 2003)



Countries growing GM crops in 2003

50,000 hectares, or more		Less than 50,000 hectares
USA	42.8 million	Spain
Argentina	13.9 million	Mexico
Canada	4.4 million	Philippines
Brasil	3.0 million	Colombia
China	2.8 million	Bulgaria
South Africa	0.4 million	Honduras
Australia	0.10 million	Germany
India	0.10 million	Indonesia
Romania	>0.05 million	
Uruguay	>0.05 million	

Contributors to this brief:

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ABSP

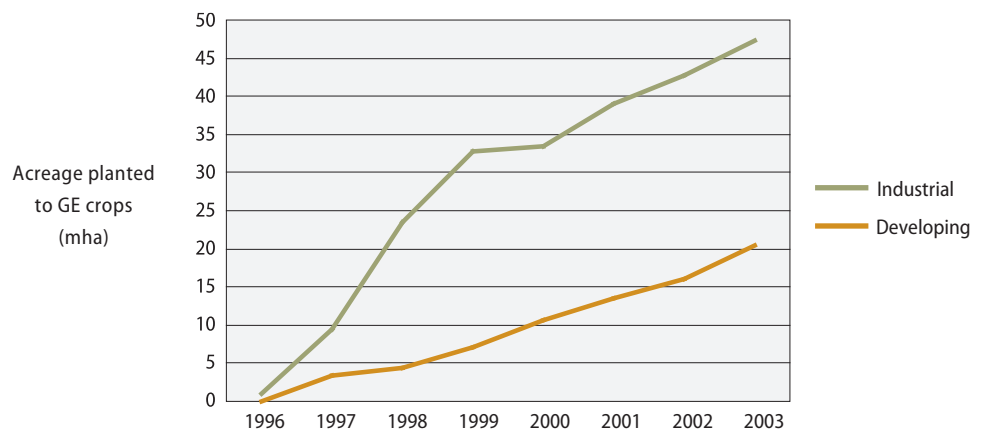


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* PBS & ABSP II are supported by the United States Agency for International Development

Developing countries increasingly adopt genetically engineered crops. In 2003, more than one quarter of the global transgenic area was grown in developing countries. Figure 2 shows the area of GE crops in industrial and developing countries from 1996-2003. Developing countries account for an increasing proportion of the total area planted to GE crops worldwide, increasing from 14% in 1997 to 30% in 2003.

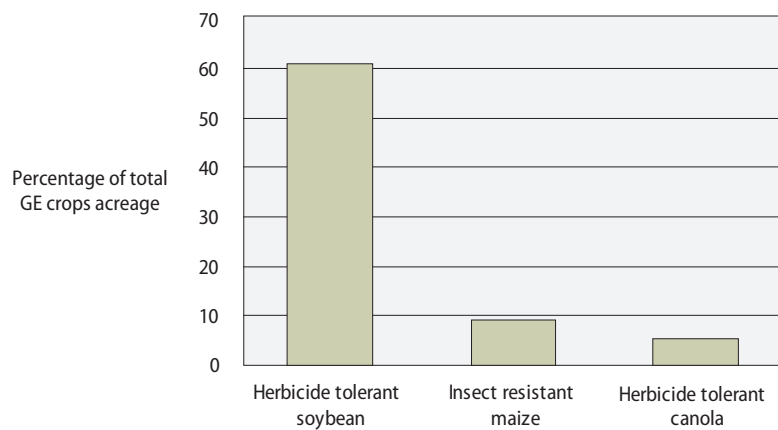
Figure 2. Growth of crops in industrial and developing countries
(James, C. 2003)



IMPORTANT GE CROPS IN 2003

- **Herbicide-tolerant soybean** was the dominant transgenic crop, grown commercially in seven countries in 2003 (USA, Argentina, Canada, Mexico, Romania, Uruguay and South Africa).
- **Insect-resistant maize** was the second most dominant crop, planted in nine countries (USA, Canada, Argentina, South Africa, Spain, Philippines, Honduras, Uruguay and Germany).
- **Herbicide-tolerant canola** was the third most dominant crop, planted in two countries, Canada and the USA.
- **Bt cotton** is increasingly important in countries such as China, India, and South Africa.

Figure 3. Dominant GE crops in 2003 (James, C. 2003)



Sources:

James, C. 2003. Preview: Global Status of Commercialized Transgenic Crops: 2003. ISAAA Brief No. 30. Ithaca, NY.